Applicant: Peter M.J. Mulier et al.

Serial No.: 10/014,388

Filing Date: October 22, 2001

Docket No.: P-8163.01 Cont 1 (M190.105.101)

Title: HELICAL NEEDLE APPARATUS FOR CREATING A VIRTUAL ELECTRODE USED FOR THE

ABLATION OF TISSUE

# **REMARKS**

This Amendment is responsive to the Office Action mailed March 10, 2004. In that Office Action, the Examiner rejected claims 21-30 under the judicially-created Doctrine of Obviousness-Type Double Patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,537,248. Claims 21-30 were further rejected by the Examiner under 35 U.S.C. §103(a) as being unpatentable over Mulier et al., U.S. Patent No. 5,431,649 ("Mulier") in view of Daulton et al., U.S. Patent No. 6,322,559 ("Daulton") or in view of Parins et al., 5,125,928 ("Parins").

With this Response, claims 21 and 22 have been amended. Claims 21-30 remain pending in the application and are presented for reconsideration and allowance.

# **Double-Patenting Rejections**

Claims 21-30 stand rejected under the judicially-created Doctrine of Obviousness-Type Double Patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,537,248. In response, Applicants herein provide the Examiner with the necessary Terminal Disclaimer filed under 37 CFR 1.321(c) along with the appropriate fees to obviate the Examiner's double patenting rejection.

### Claim Rejections under 35 U.S.C. §103

Claims 21-30 also stand rejected under 35 U.S.C. §103(a) as being unpatentable over Mulier et al., U.S. Patent No. 5,431,649 ("Mulier") in view of Daulton et al., U.S. Patent No. 6,322,559 ("Daulton") or in view of Parins et al., 5,125,928 ("Parins"). Applicants respectfully disagree with the Examiner's rejection.

In raising this §103(a) rejection, the following is provided by the Examiner:

"Mulier et al disclose an invention substantially as claimed (Figures 3-5). However, Mulier et al do not specifically disclose the use of dual helical coils in parallel relationships.

On the other hand, Daulton et al teach the use of dual helical coils (22 & 24) in parallel relationships (abstract, Figures 3 & 4, claims 1 & 7). Similarly,

Applicant: Peter M.J. Mulier et al.

Serial No.: 10/014,388

Filing Date: October 22, 2001

Docket No.: P-8163.01 Cont 1 (M190.105.101)

Title: HELICAL NEEDLE APPARATUS FOR CREATING A VIRTUAL ELECTRODE USED FOR THE

ABLATION OF TISSUE

Parins et al teaches the use of dual helical coils (31 & 33) in parallel relationships (Figures 2 & 6).

Therefore, it would have been obvious for one skilled in the art to modify the invention to Mulier et al to design the helical coils as electrode needles to have them wound in parallel relationship, as taught to be desirable in Daulton et al or Parins et al."

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See MPEP 2143.01. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). It is respectfully submitted that the combination of Mulier with Parins infringes on the rule of *In re Ratti*.

Mulier's Figure 6 "illustrates the associated apparatus for administration of conductive solution before and during application of R-F energy to the helical electrode." Col. 2, lines 43-45. In the discussion of Figure 6, Mulier goes on to recite that "[a]n electrosurgical generator 200 for providing R-F electrical energy is illustrated in functional block form, coupled to electrical connector 24 and to a ground plate electrode 202..." Col. 5, l. 68- Col. 6, l. 3. Thus, given the presence of a ground plate electrode 202, it is clear that the helical electrode in Mulier is configured and used as a monopolar electrode.

Parins, on the other hand, recites that "[t]he application of an RF voltage across a pair of bipolar electrodes is used..." Abstract. Thus, it is clear that the electrodes in Parins are configured and used as bipolar electrodes. Consequently, if Mulier is modified for dual helical coils in parallel relationships as indicated by the Examiner, it would have to be for providing a bipolar electrode arrangement as also taught by Parins. However, this changes the principle of

Applicant: Peter M.J. Mulier et al.

Serial No.: 10/014,388

Filing Date: October 22, 2001

Docket No.: P-8163.01 Cont 1 (M190.105.101)

Title: HELICAL NEEDLE APPARATUS FOR CREATING A VIRTUAL ELECTRODE USED FOR THE

ABLATION OF TISSUE

operation of Mulier from a monopolar to a bipolar device and, based on the rule of *In re Ratti*, the teachings of the references are not sufficient to render the claims *prima facie* obvious.

Notwithstanding the foregoing deficiencies of the art rejections against the claims, independent claim 21 has been amended to expedite prosecution, thus rendering any further discussion of the rejection against claims 21-30 moot.

Specifically, independent claim 21 has been amended to recite that the first and second electrodes are electrodes of a bipolar electrode configuration, which is in sharp contrast to Mulier. Support may be found, for example, at page 14, lines 6-8.

In view of the foregoing amendments and remarks, it is respectfully submitted that amended independent claim 1 is patentable over Mulier in view of Parins, and the rejection of claim 21 under 35 U.S.C. 103§(a) should be withdrawn upon reconsideration.

Claims 22-30 depend directly or ultimately from amended independent claim 21, and under 35 U.S.C. §112 must be construed to include all of the limitations of independent claim 21 including their own limitations. Accordingly, for the deficiencies of Mulier and Parins discussed above with respect to amended independent claim 21, it is respectfully submitted that claims 22-30 are also patentable over the cited references, and the rejection of claims 22-30 under 35 U.S.C. 103§(a) should be withdrawn upon reconsideration.

## **CONCLUSION**

No fees are required under 37 C.F.R. 1.16(b)(c). However, if such fees are required, the Patent Office is hereby authorized to charge Deposit Account No. 50-0471.

Applicant: Peter M.J. Mulier et al.

Serial No.: 10/014,388 Filing Date: October 22, 2001

Docket No.: P-8163.01 Cont 1 (M190.105.101)

Title: HELICAL NEEDLE APPARATUS FOR CREATING A VIRTUAL ELECTRODE USED FOR THE

ABLATION OF TISSUE

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this response.

Respectfully submitted,

Peter M.J. Mulier et al.,

By their attorneys,

DICKE, BILLIG & CZAJA, PLLC Fifth Street Towers, Suite 2250 100 South Fifth Street Minneapolis, MN 55402 Telephone: (612) 573-2004

Facsimile: (612) 573-2005

Date: JUNE 16, JOH

TAC:jmc

Timothy A. C.

Reg. No. 39,6

### CERTIFICATE UNDER 37 C.F.R. 1.8:

Name:

Timothy A

7